LIMITED WARRANTY STATEMENT

1. WHAT THIS WARRANTY COVERS:

LG offers you a limited warranty that the enclosed subscriber unit and its enclosed accessories will be free from defects in material and workmanship, according to the following terms and conditions:

1. The limited warranty for the product extends for ONE (1) year beginning on the date of purchase of the product by the original end user.
2. The limited warranty extends only to the original end user of the product and is not assignable or transferable to any subsequent purchaser/end user.
3. This warranty is good only to the original end user of the product during the warranty period as long as it is in Canada.
4. Upon request from LG, the consumer must provide information to reasonably prove the date of purchase.
5. During the applicable warranty period, LG will repair or replace at LG's sole option, without charge to the original end user, any defective component part of the phone or accessory.
6. LG may use rebuilt, reconditioned or new parts or components when repairing any product or replace a product with a rebuilt, reconditioned or new product.

2. WHAT THIS WARRANTY DOES NOT COVER:

1. Defects or damages resulting from use of the product in other than its normal and customary manner.
2. Defects or damages from abnormal use, abnormal conditions, improper storage, exposure to moisture or dampness, unauthorized modifications, unauthorized connections, unauthorized repair, misuse, neglect, abuse, accident, alteration, improper installation or other acts which are not the fault of LG, including damage caused by spills of food or liquids.
3. Breakage or damage to antennas unless caused directly by defects in material or workmanship.
4. The fact that the Customer Service Department at LG was not notified by the original end user of the alleged defect or malfunction of the product, during the warranty period.
5. Products which have had their serial numbers removed or made illegible.

6. Damage resulting from use of non-LG approved accessories.

7. All plastic surfaces and all other externally exposed parts that are scratched or damaged due to normal customer use.

8. Products serviced by non-authorized persons or companies.

Notes:

1. This limited warranty supersedes all other warranties, expressed or implied either in fact or by operations of law, statutory or otherwise, including, but not limited to any implied warranty of merchantability or fitness for a particular purpose.

2. Shipping damage is the sole responsibility of the shipping company.

3. EXCLUSION OF LIABILITY:

No other express warranty is applicable to this product.

THE DURATION OF ANY IMPLIED WARRANTIES, INCLUDING THE IMPLIED WARRANTY OF MARKETABILITY, IS LIMITED TO THE DURATION OF THE EXPRESS WARRANTY HEREIN.
LG ELECTRONICS CANADA, INC. SHALL NOT BE LIABLE FOR THE LOSS OF THE USE OF THE PRODUCT, INCONVENIENCE, LOSS OR ANY OTHER DAMAGES, DIRECT OR CONSEQUENTIAL, ARISING OUT OF THE USE OF, OR INABILITY TO USE, THIS PRODUCT OR FOR ANY BREACH OF ANY EXPRESS OR IMPLIED WARRANTY, INCLUDING THE IMPLIED WARRANTY OF MARKETABILITY APPLICABLE TO THIS PRODUCT.

4. HOW TO GET WARRANTY SERVICE:

To obtain warranty service, please call the following telephone number from anywhere in Canada:

LG Electronics Canada, Inc.

Tel. 1-888-542-2623

www.lg.ca (see links to “Wireless Phone Service”)

LG Electronics Canada Inc.

Mississauga, Ontario

ENGLISH

LG 9100

User Guide

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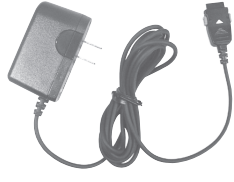
Unpacking

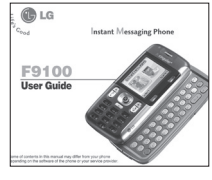
Check to make sure that you have all the parts shown below.

Handset

Standard Battery



Travel Charger



User Guide

For Your Safety

Important Information

This user guide contains important information on the use and operation of this phone. Please read all the information carefully for optimal performance and to prevent any damage to or misuse of the phone. Any changes or modifications not expressly approved in this user guide could void your warranty for this equipment.

Before You Start

Safety Instructions

WARNING! To reduce the possibility of electric shock, do not expose your phone to high humidity areas, such as the bathroom, swimming pool, etc.

Always store your phone away from heat. Never store your phone in settings that may expose it to temperatures less than -18°C or greater than 40°C, such as outside during a snowstorm or in your car on a hot day. Exposure to excessive cold or heat will result in malfunction, damage and/or catastrophic failure.

Be careful when using your phone near other electronic devices. RF emissions from your mobile phone may affect nearby inadequately shielded electronic equipment. You should consult with manufacturers of any personal medical devices such as pacemakers and hearing aides to determine if they are susceptible to interference from your mobile phone. Turn off your phone in a medical facility or at a gas station. Never place your phone in a microwave oven as this will cause the battery to explode.

IMPORTANT! Please read the TIA SAFETY INFORMATION on page 74 before using your phone.

Safety Information

Please read and observe the following information for the safe and proper use of your phone and to prevent any unanticipated damage. Also, keep the user's manual in an accessible place at all times after reading it.

- Unplug the power cord and charger during a lightning storm to avoid electric shock or fire.
- Do not use your phone in high explosive areas.

- Do not put your phone in a place subject to excessive dust, and keep the minimum required distance between the power cord and heat sources.
- Do not damage the power cord by bending, twisting, pulling or subjecting it to heat. Do not use the plug if it is loose as it may cause fire or electric shock.
- Hold the power cord plug firmly to plug and unplug the power cord. Ensure the plug is firmly connected. If it is not firmly connected, it may cause excessive heat or fire.
- Do not place a heavy item on the power cord. Do not allow the power cord to be crimped as it may cause fire or electric shock.
- Be careful not to let the battery contact metal conductors such as a necklace or coins. When shorted, it may cause an explosion.
- Do not disassemble or impact the battery as it may cause electric shock, short-circuit and fire. Store the battery in a place out of reach of children.
- Using a damaged battery or placing a battery in your mouth may cause serious injury.
- Charging is displayed on the screen after connecting the travel adapter. Only if the battery is completely drained will the call indicator light be on without displaying the word “charging”.
- Do not place items containing magnetic components such as a credit card, phone card, bank book or a subway ticket, near your phone. The magnetic strip can be damaged by the phone.
- Do not hold or let the antenna come in contact with your body during a call.
- Talking on your phone for a long period of time may reduce the call quality due to heat generated during the use of the phone.
- Do not allow excessive vibration or impact to the phone.
- When you do not plan to use the phone for a long period of time, store it in a safe area with the power cord unplugged.

FCC RF Exposure Information

WARNING! Read this information before operating the phone.

In August 1996, the Federal Communications (FCC) of the United States, with its action in Report and Order FCC 96-326, adopted an updated safety standard for human exposure to radio frequency (RF) electromagnetic energy emitted by FCC regulated transmitters. Those guidelines are consistent with the safety standard previously set by both U.S. and international standards bodies.

The design of this phone complies with the FCC guidelines and these international standards.

CAUTION

Use only the supplied and approved antenna. Use of unauthorized antennas or modifications could impair call quality, damage the phone, void your warranty and/or result in violation of FCC regulations.
Do not use the phone with a damaged antenna. If a damaged antenna comes into contact with skin, a minor burn may result. Contact your local dealer for a replacement antenna.

Body-worn Operation

This device was tested for typical body-worn operations with the back of the phone kept 10mm between the user's body and the back of the phone. To comply with FCC RF exposure requirements, a minimum separation distance of 10mm must be maintained between the user's body and the back of the phone. Body-worn accessories that cannot maintain 3/4 inch (2 cm) separation distance between the user's body and the back of the phone, and have not been tested for typical body-worn operations may not comply with FCC RF exposure limits and should be avoided.

Vehicle Mounted External Antenna (optional, if available)

A minimum separation distance of 8 inches (20 cm) must be maintained between the user/bystander and the vehicle mounted external antenna to satisfy FCC RF exposure requirements.

For more information about RF exposure, visit the FCC website at www.fcc.gov

FCC Part 15 Class B Compliance

This device and its accessories comply with part 15 of FCC rules. Operation is subject to the following two conditions: (1) This device and its accessories may not cause harmful interference, and (2) this device and its accessories must accept any interference received, including interference that may cause undesired operation.

Cautions for the Battery

- Do not disassemble.
- Do not short-circuit.
- Do not expose to high temperature: 60°C (140°F).
- Do not incinerate.

Battery Disposal

- Please dispose of your battery properly or bring to your local wireless carrier for recycling.
- Do not dispose in fire or with hazardous or flammable materials.

Adapter (Charger) Cautions

- Using the wrong battery charger could damage your phone and void your warranty.
- The adapter or battery charger is intended for indoor use only.

Do not expose the adapter or battery charger to direct sunlight or use it in places with high humidity, such as the bathroom.

Your Phone

Phone Components

Your Phone's Features

1. Earpiece

2. Side keys: These keys are used to control the volume of ringtone in standby mode and speaker volume during a call.

3,9. Left soft key / Right soft key: Each of these keys perform the functions indicated by the text on the display immediately above them.

4. Send key: You can use to initiate call once number is entered and to answer incoming calls**.** Press this key in standby mode to quickly access the most recent incoming, outgoing and missed calls.

5. Alphanumeric keys: These keys are used to dial a number in standby mode and to enter number or characters in edit mode.

6. Microphone: Can be muted during a call for privacy.

7. Display screen: Displays phone status icons, menu items, Web information, pictures and more in full color.

8. 5-way joystick or Navigation key: Enables scrolling through names, phone numbers, menus or settings. The 5-way joystick is also used to move the cursor up and down, right and left when writing text, using the calendar, and in some game applications. Pressing the joystick briefly selects the function. Short press will launch the WAP browser.

10. Text messaging key: One touch access to send a text message.

11. End / Power key: Allows you to power the phone on or off, end calls, or return to Standby Mode.

12. Clear key: Allows you to delete the characters entered or return you to the previous screen.

Textinput key
Toggle between Abc ABC and abc text.

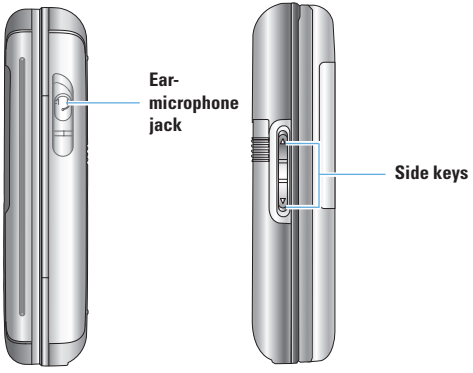
Space bar key
Enter a space.

Shift key
- A tab for shift function.
- Double tap for shift lock.

Enter key
Forces a line feed when editing text.

Softkeys
The left and right soft keys activate the prompts that appear in the soft boxes directly above them.

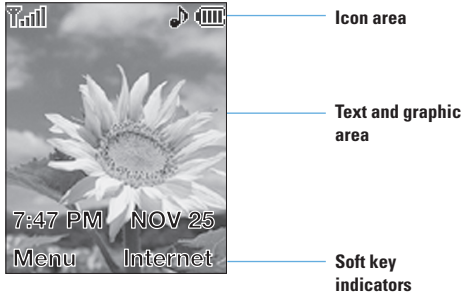
Backspace
Deletes characters.



Backlight

A backlight illuminates the display and the keypad. When you press any key or open the flip, the backlight turns on. It turns off if no key is pressed within a given period of time, depending on the **Backlight** menu option. After one minute, the display turns off to conserve your battery power. To specify the length of time the backlight is active, set the **Backlight** menu option (Menu 9.1.2). See page 63 for further details.

Display Information



Area	Description
Top line	Displays various icons.
Middle lines	Display messages, instructions and any information that you enter, such as number to be dialed.
Bottom Line	Shows the functions currently assigned to the two soft keys.

On-Screen Icons

The table below describes various display indicators or icons that appear on the phone's display screen.

Icon	Description
	Indicates the strength of the network signal.
	Indicates a call is in progress.
	Indicates that you are roaming off the network.
	Indicates that GPRS service is available.
	Indicates the alarm has been set and is on.
	Indicates the status of the battery charge.
	Indicates the receipt of a text message.
	Indicates the receipt of a voice mail.
	Indicates that you can use the download message service.
	Indicates that the vibration ringer has been set.
	Indicates the Silent profile is activated.
	Indicates the Headset profile is activated.
	Indicates the Car profile is activated.
	Indicates the General profile is activated.
	Indicates the Schedule function.

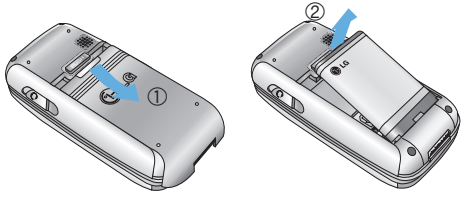
Installing the SIM Card

When you subscribe to a cellular network, you are provided with a plug-in SIM card loaded with your subscription details, such as your PIN, any optional services available and other such information.

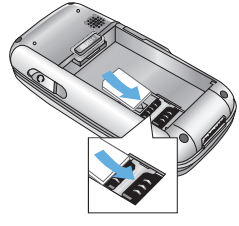
Important

The plug-in SIM card and its contacts can be easily damaged by scratches or bending, so be careful when handling, inserting or removing the card. Keep all SIM cards out of the reach of small children.

1. Power off the phone by holding down the key until the power-off image displays.
2. Remove the battery.To do so:

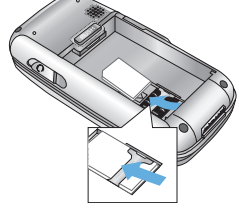


3. Slide the SIM card into the SIM card socket so that it locks the card into place. Make sure that the notched corner is facing the bottom left and the gold contacts of the card face into the phone.

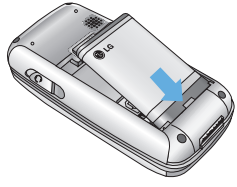


Note

When you need to remove the SIM card, slide it, as shown, and take it out of the socket.



4. Place the battery so that the tabs on the end align with the slots at the bottom of the phone.



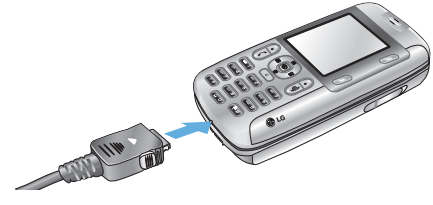
5. Press the battery cover until it clicks into place. Make sure that the battery is properly installed before switching the phone on.

Charging the Battery

Use of unauthorized accessories could damage your phone and invalidate your warranty.

To use the travel charger provided with your phone:

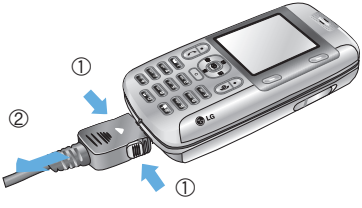
1. With the battery in position on the phone, connect the lead from the travel charger to the bottom of the phone. Check that the arrow on the lead connector is facing towards the front of the phone.
2. Connect the adapter to a standard AC wall outlet. Only use the travel charger that comes included with the package.



Warning

You must unplug the adapter before removing the battery from the phone otherwise, the phone could be damaged.

3. When charging is finished, disconnect the adapter from the power outlet and from the phone by pressing on the gray tabs on both sides of the connector while pulling the connector out.



Notice

- If your phone is powered on while charging, you'll see the bars in the battery indicator icon cycle. When the battery is fully charged, the bars in the battery indicator icon will flash on and off
- If your phone is powered off, the display will show the charging status. **'Charging'** or **'Full'** will be displayed.

If the battery fails to charge completely:

- After turning the phone on and off, please attempt to recharge the battery.
- After detaching and reattaching the battery, please attempt to recharge the battery.

Turning Your Phone On and Off

1. Hold down the key until the phone switches on.
2. If the phone asks for a PIN, enter the PIN and press the left soft key [OK]. For further details, see page 66.

The phone searches for your network and after finding it, the idle screen, illustrated below, appears on the display. Now, you can make or receive a call.

Note

The display language is preset to English at the factory. To change the language, use the Languages menu option (Menu 9.1.6). For further details, see page 64.

3. When you wish to switch the phone off, hold down the key until the power-off image displays.

Access Codes

You can use the access codes described in this section to avoid unauthorized use of your phone. The access codes can be changed by using the **Change Codes** feature (Menu 9.4.5).

Security code (4 to 8 digits)

The security code protects the unauthorized use of your phone. The default security code is set to **'0000'** and the security code is required to delete all phone entries and to activate the Restore Factory Settings menu. The security code default setting can be modified from the Security Settings menu.

Making a Call

1. Make sure your phone is powered on.
2. Enter a phone number including the area code. To edit a number on the display screen, press the right/left navigation keys to move the cursor to desired position or simply press the C key to erase one digit at a time.
   - Press and hold the C key to erase the entire number.
3. Press the key to call the number.
4. To end the call, press the key.

Making a Call by pressing the Send Key

1. Press the key, and the most recent incoming, outgoing and missed phone numbers will be displayed.
2. Highlight the desired number by using the navigation key.
3. Press the key.

Making International Calls

1. Press and hold the 0+ key for the international prefix. The '+' character can be replaced with the international access code.
2. Enter the country code, area code and the phone number.
3. Press the key.

Ending a Call

To end a call, press the key.

Making a Call From the Contact List

You can store names and phone numbers dialed frequently in the SIM card as well as the phone memory known as the Contact List.
You can dial a number by simply looking up a name in the contact list. For more details on the Contact List feature, please refer to page 59.

Adjusting the Volume

During a call, if you want to adjust the earpiece volume, use the side keys of the phone.
In idle mode you can adjust the ring volume using the side keys.

Answering a Call

When you receive a call, the phone rings and the flashing phone icon appears on the screen. If the caller can be identified, the caller's phone number (or name if stored in your Address Book) is displayed.

1. Press the key or the left soft key to answer an incoming call. If the **Any Key** menu option (Menu 9.3.2) has been set, any key press will answer a call except for the key or the right soft key.
2. End the call by closing the phone or pressing the key.

Notice

You can answer a call while using the Address Book or other menu features.

Vibrate Mode (Quick)

When the flip is closed, Vibrate Mode can be activated by holding down the key.

Signal Strength

If you are inside a building, being near a window may give you better reception. You can see the strength of your signal by the signal indicator ( ) on your phone's display screen.

Entering Text

You can enter alphanumeric characters by using the phone's keypad. For example, storing names in the Address Book, writing a message and scheduling events in the calendar all require entering text. The following text input methods are available in the phone.

T9 Mode

This mode allows you to enter words with only one keystroke per letter. Each key on the keypad has more than one letter. The T9 mode automatically compares your keystrokes with an internal linguistic dictionary to determine the correct word, thus requiring far fewer keystrokes than the traditional ABC mode.

Notice

The default setting on the phone is ABC mode and T9 can be chosen to become the default text entry mode. You can also select a different T9 language from the menu options.

ABC Mode

This mode allows you to enter letters by pressing the key labeled with the required letter once, twice, three or four times until the letter is displayed.

123 Mode (Numbers Mode)

Type numbers using one keystroke per number. To change to 123 mode in a text entry field, press key until 123 mode is displayed.

Symbol Mode

This mode allows you to enter special characters.

Changing the Text Input Mode

1. When you are in a field that allows characters to be entered, you will notice the text input mode indicator in the upper right corner of the display.
2. If you want to change modes, press and hold down the key. The available modes are displayed.
3. To switch to Symbol mode, press the key.

Using the T9 Mode

The T9 predictive text input mode allows you to enter words easily with a minimum number of key presses. As you press each key, the phone begins to display the characters that it thinks you are typing based on a built-in dictionary. As new letters are added, the word changes to reflect the most likely candidate from the dictionary.

1. When you are in the T9 predictive text input mode, start entering a word by pressing keys to . Press one key per letter.
   - The word changes as letters are typed - ignore what's on the screen until the word is typed completely.
   - If the word is still incorrect after typing completely, press the down navigation key once or more to cycle through the other word options.

Example: Press to type **Good**
Press [down navigation key] to type **Home**

- If the desired word is missing from the word choices list, add it by using the ABC mode.

2. Enter the whole word before editing or deleting any keystrokes.
3. Complete each word with a space by pressing the key.

To delete letters, press .
Press and hold down to erase entire words.

Notice

To exit the text input mode without saving your input, press .

Using the ABC Mode

Use the to keys to enter your text.

1. Press the key labeled with the required letter:
   - Once for the first letter
   - Twice for the second letter
   - And so on
2. To insert a space, press the key once. To delete letters, press the key. Press and hold down the key to clear the display.

Notice

Refer to the table below for more information on the characters available using the keys.

Please note the character availability is dependent on the language selected.

Key	Characters in the Order Display	
	Upper Case	Lower Case
1	. , - ¿ ? ¡ ! ' @ : 1	. , - ¿ ? ¡ ! ' @ : 1
2	A B C À Á Ã Ä Ç 2	a b c à á ã ä ç 2
3	D E F È É Ê Ë 3	d e f è é ê ë 3
4	G H I Í Î Ï 4	g h i í î ï 4
5	J K L 5	j k l 5
6	M N O Ó Ô Ö Ñ 6	m n o ó ô ö ñ 6
7	P Q R S 7	p q r s 7
8	T U V Ù Ú Û Ü 8	t u v ù ú û ü 8
9	W X Y Z 9	w x y z 9
0	Space Key	Space Key

Using the 123 (Numbers) Mode

The 123 Mode enables you to enter numbers in a text message (a telephone number, for example).

Press the keys corresponding to the required digits before manually switching back to the appropriate text entry mode.

Using the Symbol Mode

The Symbol Mode enables you to enter various symbols or special characters.

To enter a symbol, press the key. Use the navigation keys to select the desired symbol and press the key.

Selecting Functions and Options

Your phone offers a set of functions that allows you to customize the phone. These functions are arranged in menus and sub-menus, accessed via the two soft keys marked and . Each menu and sub-menu allows you to view and alter the settings of a particular function.

The roles of the soft keys vary according to the current context; the label on the bottom line of the display just above each key indicates its current role.

Press the left soft key to acces the available Menus.

Press the right soft key to acces the Internet.

Address Book

You can store phone numbers and their corresponding names in the memory of your SIM card.

In addition, you can store up to 255 numbers and names in the phone memory.

The SIM card and phone memory, although physically separate, are utilized like a single entity known as the Contact List (See page 59 for details).

In-Call Menu

Your phone provides a number of control functions that you can use during a call. To access these functions during a call, press the left soft key [**Options**].

1. Contact List
2. Hold Call
3. End Call
4. Text Message
5. Send DTMF
6. Mute
7. Write Memo
8. Voice Recording

During a Call

The menu displayed on the handset screen during a call is different than the default main menu displayed while in the idle screen, and the options are described below.

Making a Second Call

You can get a number you wish to dial from the Address Book to make a second call. Press the left soft key, then select Contact List.

Swapping Between Two Calls

To switch between two calls, press the key.

Answering an Incoming Call

To answer an incoming call when the handset is ringing, press the . The handset is also able to warn you of an incoming call while you are already on a call. A tone sounds in the earpiece, and the display will show that a second call is waiting.

This feature, known as **Call Waiting,** is only available if your network supports it. For details of how to activate and deactivate it see **Call Waiting** (Menu 9.3.4).

If Call Waiting is on, you can put the first call on hold and answer the second, by pressing .

You can end the current call and answer the waiting call by pressing the left soft key [Options] and then selecting **Active call** in the **End call** submenu.

Rejecting an Incoming Call

You can reject an incoming call without answering by simply pressing the key or holding the when the flip is closed.

During a call, you can reject an incoming call by pressing the right soft key and selecting **Reject call.**

Muting the Microphone

You can mute the microphone during a call by pressing the right soft key **Mute** or going to the [**Options**] then selecting Mute. The handset can be unmuted by selecting by pressing the right soft key [**Unmute**] or choosing **Unmute** in the [**Options**].

Multiparty or Conference Calls

The multiparty or conference service provides you with the ability to have a simultaneous conversation with more than one caller, if your network service provider supports this feature. A multiparty call can only be set up when you have one active call and one call on hold and both calls have been answered. Once a multiparty call is set up, calls may be added, disconnected or separated (that is, removed from the multiparty call but still connected to you) by the person who sets up the multiparty call. These options are all available from the **In-Call** menu. The maximum callers in a multiparty call are five. Once started, you are in control of the multiparty call and only you can add callers to the multiparty call.

Making a Second Call

You can make a second call while currently on a call. Enter the second number and press the . When the second call is connected, the first call is automatically placed on hold. You can swap between calls, by pressing the key.

Setting up a Conference Call

To set up a conference call, place one call on hold and while the active call is on, press the left soft key [**Options**] then select **Conference** and then **Join.**

Activate the Conference Call on Hold

To activate a conference call on hold, press the left soft key [**Options**] then select **Retrieve Call.**

Adding Calls to the Conference Call

To add a call to an existing conference call, dial another number, press the left soft key [**Options Menu**] then select **Conference** and then **Join.**

Private Call in a Conference Call

To have a private call with one caller from a conference call, dial another number, press the left soft key [**Options Menu**] then select **Conference** and then **Private.**

Ending a Conference Call

Currently displayed caller from a conference call can be disconnected by pressing the key.

Menu Tree

The following illustration shows the available menu structure and indicates the:

- Number assigned to each menu option.
- Page where you can find the feature description.

1. Recent Calls (see page 37)

- **1.1 Missed Calls**
- **1.2 Dialed Calls**
- **1.3 Received Calls**
- **1.4 Delete Recent Calls**
- **1.5 Call Durations**
  - 1.5.1 Last Call
  - 1.5.2 Received Calls
  - 1.5.3 Dialed Calls
  - 1.5.4 All Calls
- **1.6 Data Information**
  - 1.6.1 WAP Information
  - 1.6.2 External Device
  - 1.6.3 Total Data

2. Messaging (see page 39)

- **2.1 Text Messages**
  - 2.1.1 Write Message
  - 2.1.2 Inbox
  - 2.1.3 Sent
  - 2.1.4 Drafts
  - 2.1.5 Settings
  - 2.1.6 Delete All
- **2.2 Multimedia Messages**
  - 2.2.1 Write Message
  - 2.2.2 Inbox
  - 2.2.3 Outbox
  - 2.2.4 Sent
  - 2.2.5 Drafts
  - 2.2.6 Settings
- * **2.3 Voice Mail**
  - 2.3.1 Listen To Voice Mail
  - 2.3.2 Voice Mailbox Number
- **2.4 Download Messages**
  - 2.4.1 Inbox
  - 2.4.2 Receive
- **2.5 Templates**
  - 2.5.1 Text
  - 2.5.2 Multimedia
  - 2.5.3 Business Card

* : Shown only if supported by SIM card

2.6 Memory Status
2.6.1 Text
2.6.2 Multimedia

3. Games & Apps (see page 48)
3.1 Download Games
3.2 Games & Apps
3.3 Access Point
3.4 Information
3.4.1 Memory Status
3.4.2 Java Version

4. Media Services (see page 50)
4.1 Games & Apps
4.2 Ringtone/Audio
4.3 Images
4.4 Media Services
4.5 View Online Album

5. Internet (see page 52)
5.1 GoRogers
5.2 Access Point
5.3 Cache Settings
5.3.1 Clear Cache
5.3.2 Cache Check
5.4 Security Certificates
5.5 WAP Information

6. Sounds (see page 54)
6.1 Download Ring Tunes
6.2 Ringtones
6.3 Volume
6.4 Ring Alert Type
6.5 Message Alert Tones
6.6 Key Tones
6.7 Voice Recording

7. Tools (see page 55)

- **7.1 Alarm Clock**
- **7.2 Calendar**
- **7.3 Voice Recording**
- **7.4 Calculator**
- **7.5 Memo**
- **7.6 World Time**
- **7.7 Unit Converter**

8. Address Book (see page 59)

- **8.1 Contact List**
- **8.2 New Contact**
- **8.3 Speed Dials**
- **8.4 Voice Tag List**
- **8.5 Caller Groups**
- **8.6 Copy All**
  - 8.6.1 SIM To Phone
  - 8.6.2 Phone To SIM
- **8.7 Delete All**
- **8.8 Set Memory**
- **8.9 Information**
  - 8.9.1 Memory Status
  - ✻ 8.9.2 Own Number

9. Settings (see page 63)

- **9.1 Display**
  - 9.1.1 My Wallpaper
  - 9.1.2 Backlight
  - 9.1.3 Contrast
  - 9.1.4 Screen Saver
  - 9.1.5 Power On Sound
  - 9.1.6 Languages
  - 9.1.7 Menu Style
- **9.2 Date & Time**
  - 9.2.1 Set Date
  - 9.2.2 Date Format
  - 9.2.3 Set Time
  - 9.2.4 Time Format
  - 9.2.5 Auto Update

✻ : Shown only if supported by SIM card

9.3 Call Settings

* 9.3.1 Call Forwarding
  9.3.2 Answer Mode
* 9.3.3 Send My Number
* 9.3.4 Call Waiting
  9.3.5 Minute Minder
  9.3.6 Auto Redial
  9.3.7 Send DTMF

9.4 Security

  9.4.1 PIN Code Request
  9.4.2 Phone Lock
  9.4.3 Auto Key Lock
* 9.4.4 Call Barring Service
  9.4.5 Fixed Dial Number
  9.4.6 Change Codes

9.5 Connection

* 9.5.1 Network Selection
  9.5.2 GPRS Attach
  9.5.3 Access Point
  9.5.4 Reset Access Point

9.6 Reset Setting

* : Shown only if supported by SIM card

Recent Calls

You can check the record of missed, received and dialed calls only if the network supports the Calling Line Identification (CLI) within the service area.

The number and name (if available) are displayed together with the date and time at which the call was made. You can also view call times.

Missed Calls *Menu 1.1*

This option lets you view the last 10 unanswered calls. You can also:

- View the number if available and call it, or save it in the Address Book
- Enter a new name for the number and save both in the Address Book
- Send a message to this number
- Delete the call from the list

Dialed Calls *Menu 1.2*

This option lets you view the last 20 outgoing calls (called or attempted). You can also:

- View the number if available and call it, or save it in the Address Book
- Enter a new name for the number and save both in the Address Book
- Send a message to this number
- Delete the call from the list

Received Calls *Menu 1.3*

This option lets you view the last 20 incoming calls. You can also:

- View the number if available and call it, or save it in the Address Book
- Enter a new name for the number and save both in the Address Book
- Send a message to this number
- Delete the call from the list

Delete Recent Calls *Menu 1.4*

Allows you to delete the **Missed, Received** and **Dialed Calls** lists. You can delete the **All Calls** list at one time.

Call Durations *Menu 1.5*

Allows you to view the duration of your incoming and outgoing calls. You can also reset the call time. The following timers are available:

Last Call *(Menu 1.5.1)*

Length of the last call.

Received Calls *(Menu 1.5.2)*

Length of the incoming calls.

Dialed Calls *(Menu 1.5.3)*

Length of the outgoing calls.

All Calls *(Menu 1.5.4)*

Total length of all calls made and incoming calls since the timer was last reset.

Notice

The actual time invoiced for calls by your service provider may vary, depending upon network features, rounding-off for billing and so forth.

Data Information *Menu 1.6*

You can check the amount of data transferred over the network through the GPRS information option.

In addition, you can also view how much time you are online.

Notice

GPRS General Packet Radio Service

WAP Information *(Menu 1.6.1)*

You can check the data volume and the duration through WAP.

External Device *(Menu 1.6.2)*

You can check the data volume and the duration through GPRS by using an external device such as a serial port.

Total Data *(Menu 1.6.3)*

You can check the total amount of data through WAP and an external device.

Text Messages *Menu 2.1*

Your phone can receive voice mail notification messages and Short Message Service (SMS) messages.

Voice mail and SMS are network services. Please contact your service provider for more information. When the icon appears, you have received a new voice mail. When the icon appears, you have received a new text message. If the message memory is full, an error message is displayed, the icon flashes and you cannot receive any new messages. Use the **Delete** option in the **Inbox** (Menu 2.1.2) to delete obsolete messages. Once there is space in the memory, any undelivered SMS messages will be received (provided sufficient space is available).

Write Message *(Menu 2.1.1)*

You can write and edit text messages of up to 918 characters.

1. Type in a message using alphanumeric keypad. For details on how to enter text, refer to page 24 (**Entering Text**).
2. After completing the message, select the required option by pressing the left soft key [**Option**].

The following options are available.

- **Send To Number:** Enter the phone number or select the number from the address book.
- **Send To Email:** Enter the email or select the email from the address book.
- **Save To Drafts:** Save the message so that it can be sent later.
- **T9 Languages:** Choose between English, Spanish or French T9 language. For details on how to enter text, refer to page 25 (**Using the T9 Mode**).
- **Clear Text:** Delete the written message.
- **Exit Editor:** Exit the text editor.

The following options are available. (Press the right soft key [**Insert**])

- **Symbol:** Attaches special characters.
- **Text Templates:** Use the text templates already set in the phone.
- **Phone Number:** Attaches a phone number.
- **Business Card:** Attaches your name card.

Inbox *(Menu 2.1.2)*

Received text messages, page messages and email lists may be searched and the contents may be viewed. Received messages are displayed from newest to oldest.

The following options are available.

- **Reply:** Replies to the received message.
- **Delete:** Deletes the selected message from the Inbox.
- **Forward:** Forwards a received message to other recipients. After recipients are entered, the message can be forwarded.
- **Return Call:** Calls back the sender.
- **Extract:** Extracts a phone number and email address from the message.

Sent *(Menu 2.1.3)*

Shows lists and contents of sent messages in this menu and also verifies if transmission was successful.

The following options are available.

- **Delete:** Deletes the selected message from the Outbox.
- **Forward:** Forwards the current message to other recipients.

Drafts *(Menu 2.1.4)*

This menu option shows the draft message list. Scroll through the list using the up/down navigation keys.

The following options are available.

- **View:** You can view a selected message.
- **Delete:** Deletes the selected draft message.
- **Edit:** You can edit a selected message.
- **Delete All:** Allows you to erase all messages.

Settings *(Menu 2.1.5)*

This menu allows you to set up default SMS information.

* ▶ **Message Types:** Allows you to set the default message type (Text,Voice, Fax, Paging, X.400, E-mail, ERMES). The network can convert the messages into the selected format. The type of message you desire can be set to Text Type.
* ▶ **Valid Period:** Allows you to set the length of time for which your text messages will be stored at the SMS center while attempts are made to deliver them to the recipient. Possible values are Maximum, 30 Minutes, 1 Hour, 6 Hours, 1 Day and 1 Week which can be authorized by your service provider.
* ▶ **Delivery Reports**: Allows you to activate or deactivate the report function. When this function is activated, the network informs you whether or not your message has been delivered.
* ▶ **Reply With Same Service:** Allows the recipient of your SMS message to send you a reply via your message center, if the service is provided by the network.
* ▶ **Message Center Number**: Allows you to store or change the number of your email gateway required when sending text messages. You must obtain this number from your service provider.
- ▶ **Email Gateway**: Allows you to store or change the number of your email gateway required when sending text messages.
- ▶ **Subject:** If you set it to **Yes,** allows you to enter the subject.
- ▶ **Bearer Setting:** You can select GPRS or GSM. Contact your network operator or service provider for information related to setting a selected bearer, pricing and connecting speed.

  GSM Preferred / GPRS Preferred

Delete All *(Menu 2.1.6)*

Allows you to delete all text messages.

Multimedia Messages *Menu 2.2*

A multimedia message can contain text, images, and / sound clips. This feature can be used only if it is supported by your network operator or service provider. Only devices that offer compatible multimedia message or e-mail features can receive and send multimedia messages. Attach to add Symbol, Picture,

* : Shown only if supported by SIM card

Sound, Recorded Voice, Text Template.

Write Message *(Menu 2.2.1)*

The following options are available.

- **Send:** Supports multiple number and email addresses.
- **Preview:** Allows you to see the multimedia message you wrote.
- **Save:** Allows you to save multimedia messages as a draft or as templates.
- **Delete:** Deletes the MMS message.
- **Slide Duration:** Allows you to set a timer for the slide and text.
- **Slide Format:** Allows you to make the message contents aligned right, left, top and bottom.
- **Add Slide:** Allows you to add a slide before or after the current slide.
- **Add Sound:** Allows you to add a sound before or after the current sound.
- **Delete Image:** Deletes the current image.
- **Delete Sound:** Deletes the current sound.

Note

Delete Image and Delete Sound options will only be visible after image or sounds are created within a new message.

Inbox *(Menu 2.2.2)*

You will be alerted when you have received messages. They will be stored in the Inbox. In the Inbox, you can identify each message by icons. For detail, see the icon directive below.

If the phone has 'no space for message', you can make space in each repository by deleting messages, media and applications.

- **Timer Stop:** Timer stop menu is displayed when you receive the message including various pictures. Usually, the pictures slide automatically. However, if you select this menu, you can see the next picture by pressing the left soft key manually.
- **Previous Slide:** View the previous page.
- **Restart:** Allows you to replay multimedia messages.
- **Save Message:** Allows you to save a multimedia message in draft or as template.
- **Save Items:** Allows you to extract picture and sound.
- **Details:** Allows you to view information about received messages; Sender's address, Subject (only for multimedia message), Message date & time,

Message type, Message size.

- **Reply:** Allows you to reply to the sender.
- **Reply All:** Allows you to reply to the senders.
- **Delete Message:** Allows you to delete the current message.
- **Forward:** Allows you to forward the selected message to other recipients.

Outbox *(Menu 2.2.3)*

Allows you to see sent messages here.

Sent *(Menu 2.2.4)*

Sent messages are stored, and you can see them here.

- **Timer Stop:** Timer stop menu is displayed when you receive the message including various pictures. Usually, the pictures slide automatically. However, if you select this menu, you can see the next picture by pressing the left soft key manually.
- **Previous Slide:** View the previous page.
- **Restart:** Allows you to replay current messages.
- **Save Message:** Allows you to save multimedia message in draft or as template.
- **Save Items:** Saves the item such as image or sound as an attachment in a message.
- **Details:** Allows you to view information about outbox messages; Subject (only for multimedia message), Message date & time, Message type, Message size.
- **Reply:** Allows you to reply to the current message.
- **Reply All:** Allows you to reply to all the messages.
- **Delete Message:** Allows you to delete the current message.
- **Forward:** Allows you to forward the current message to other recipients.

Drafts *(Menu 2.2.5)*

Using this menu, you can preset up to five multimedia messages that you use most frequently. This menu shows the preset multimedia message list.

The following options are available.

- **Send:** Supports multiple number and email addresses.
- **Preview:** Allows you to see the multimedia message you wrote.
- **Save:** Allows you to save multimedia messages as a draft or as templates.
- **Delete:** Allows you to delete the image or sound.

- **Slide Duration:** Allows you to set a timer for the slide and text.
- **Slide Format:** Allows you to make the message contents aligned right, left, top and bottom.
- **Add Slide:** Allows you to add a slide before or after the current slide.
- **Remove Slides:** Removes slides from your message.
- **Add Sound:** Add sound to your message.

Note

You must create one draft multimedia message in order to see some of the listed options.

Settings *(Menu 2.2.6)*

Via this menu, you can set up default multimedia message information.
The following options are available:

- **Message Subject:** Enter the message title.
- **Slide Duration:** Displays the duration of each page when writing the message.
- **Alignment:** Set the position of a message and text message.
  - **Image Bottom**
  - **Image Left**
  - **Image Top**
  - **Image Right**
- **Validity Period:** Set the duration for keeping messages on the network server. Options are: Maximum, 30 Minutes, 1 Hour, 6 Hours, 1 Day or 1 Week.
- **Auto Download**
  - **On:** If you select this, messages are downloaded automatically on receipt.
  - **Off:** Defers downloading messages.
- **Message Center URL:** Enter the address of an MMS server to use the MMS service.
- **Access Point:** For further details, see page 53.

Note

During MMS receive mode, there will be a red arrow icon in the upper right corner of the stand-by screen. WAP and MMS menus will not be accessible.

*Voice Mail *Menu 2.3*

This menu provides you with a quick way of accessing your voice mailbox (if provided by your network). Before using this feature, you must enter the voice server number obtained from your service provider.

When a new voicemail is received, the symbol will

* : Shown only if supported by SIM card

be displayed on the screen. Please check with your network service provider for details of their service in order to configure the handset accordingly.

Listen To Voice Mail *(Menu 2.3.1)*

Before using this feature, you must enter the voice server number obtained from your service provider. You can then select this option and press the OK soft key to listen to your messages.

You can quickly connect to the first voice server by pressing and holding the key in Idle Mode.

Voice Mailbox Number *(Menu 2.3.2)*

Allows you to change the voice mail server number, if necessary.

Note

Voice Mail is a network feature. Please contact your service provider for further details.

Download Messages *Menu 2.4*

Inbox *(Menu 2.4.1)*

You can order push messages from WAP service providers. Push messages are notifications of, for example, news headlines and they may contain a text message or address of a WAP service. For availability and subscription, contact your WAP service provider. Service providers can update an existing push message every time a new push message is received. Messages can be updated even if you have moved them to another folder. Push messages expire and they are deleted automatically.

- **Information:** Shows the information of received push messages.
- **Load:** Allows you to connect to a specific site using the information in the received push message.
- **Delete:** Deletes the selected push message.

Receive *(Menu 2.4.2)*

You can set the option whether you will receive the message or not.

Templates *Menu 2.5*

There are 6 predefined messages in the list. You can view and edit the template messages or create new messages.

Text *(Menu 2.5.1)*

- **Please call me back**
- **Where are you now?**
- **Urgent! Please contact.**
- **I'm late. I will be there at**
- **I'm on the way.**
- **I love you**

The following options are available.

- **Edit:** Allows you to write a new message or edit the selected template message.
- **Send Via Text Message:** Sends the selected template message by SMS.
- **Send Via Multimedia Message:** Sends the selected template message by MMS.
- **Delete:** Allows you to delete the selected template message.

Multimedia *(Menu 2.5.2)*

For further details, see page 41.

- **Send:** Supports multiple number and email addresses.
- **Preview:** To see the multimedia message you wrote.
- **Save:** Allows you to save multimedia messages as a draft or as templates.
- **Delete:** Deletes the MMS message.
- **Slide Duration:** Allows you to set a timer for the slide and text.
- **Slide Format:** Allows you to make the message contents aligned right, left, top and bottom.
- **Add Slide:** Allows you to add a slide before or after the current slide.
- **Add Sound:** Allows you to add a sound before or after the current sound.

Business Card *(Menu 2.5.3)*

This option allows you to make your own name card. Key in the Name, Mobile number, Office number, Fax number and E-mail address.

- **Edit:** Allows you to write a new message or edit the selected name card.
- **Send Via Text Message:** Sends the selected name card by SMS.
- **Send Via Multimedia Message:** Sends the selected name card by MMS.
- **Delete:** Allows you to delete the selected name card.

Memory Status *Menu 2.6*

You can check the current memory status for Text and Multimedia messages.

Text *(Menu 2.6.1)*

You can check the current memory status for Messaging and Delivery Reports.

Multimedia *(Menu 2.6.2)*

You can check the current memory status for Total, Used and Free.

Games & Apps

Java is a technology developed by Sun Microsystems. Similar to the way you would download the Java Applet using the standard Netscape or MS Internet Explorer browsers, Java MIDlet can be downloaded using the WAP enabled phone. Depending on the service provider, all Java based programs such as Java games can be downloaded and run on a phone. Once downloaded, the Java program can be viewed within the Games & Apps menu where you can select, execute or delete. The Java program files saved in the phone are in .JAD and .JAR formats.

Note

The JAR file is a compressed format of the Java program and the JAD file is a description file that includes all detailed information. From the network, prior to download, you can view all detailed file descriptions from the JAD file.

Warning

Only J2ME (Java 2 Micro Edition) based programs will run in a phone environment.
The J2SE (Java 2 Standard Edition) based programs will only run in a PC environment.

Download Games *Menu 3.1*

This menu option connects to Rogers' game download site.

Games & Apps *Menu 3.2*

Games & Apps menu displays the list of Java programs downloaded. All previously downloaded programs can be selected, deleted or viewed in detail within the Games & Apps menu. From the list within the Games & Apps menu, the following options are available:

- **Open:** Opens the selected program. The list includes all Java programs installed in the phone.
- **Delete:** Deletes the selected program. Once deleted, you will not be able to restore the program unless it is downloaded again using the WAP.
- **Send Information:** Selected Java MIDlet information such as MIDlet name, size, version, vendor and jad URL can be sent via SMS.

- **Information:** Display detailed information on the selected program. This includes the program name, program size, program version, vendor information and the website address or the URL.

Access Point *Menu 3.3*

For futher details, see page 53.

Information *Menu 3.4*

The downloaded programs using WAP are stored in the phone memory. There is a maximum memory capacity in the phone and once you exceed this memory, you will not be able to store any more programs. The View Information menu allows you to check the available memory capacity in the phone.

Memory Status *(Menu 3.4.1)*

Displays maximum memory capacity and total available memory information.

Java Version *(Menu 3.4.2)*

Displays current Java version.

Media Services

Games & Apps *Menu 4.1*

For further details, see page 48 (Menu 3.2).

Ringtone / Audio *Menu 4.2*

The left soft key [Options] will bring up the following option.

- **Send Via Text Message:** Downloaded sound can be sent via SMS.
- **Send Via Multimedia Message:** Downloaded sound can be sent via MMS.
- **Set As Ring Tone:** Currently selected Sound can be set as a Ring Tune.
- **Delete:** Currently selected Sound can be deleted.
- **Edit Title:** Title of currently selected Sound can be edited.
- **Delete All:** All Sounds can be deleted.

Note

Sounds supplied as default can only be used under the Set As Ring Tone mode.

Graphics *Menu 4.3*

The left soft key [Options] will bring up the following option.

- **Send Via Multimedia Message:** Downloaded image can be sent via MMS.
- **Set As Wallpaper:** Currently selected Picture can be set as a Wallpaper.
- **Delete:** Currently selected Picture can be deleted.
- **Edit Title:** Title of currently selected Picture can be edited.
- **Delete All:** All Pictures can be deleted.

Note

Pictures supplied as default can only be used under the Set As Wallpaper mode.

Multimedia Contents *Menu 4.4*

You can view, delete, or control downloaded contents. You can get animation from WAP sites, MMS or SMS. While you're checking each content, you can send it via SMS or MMS, edit or delete it.

View Online Album *Menu 4.5*

The Online Album is a space to keep the user's photos and MMS data(pictures). We can get access to the View Online Album by mobile phone. Also, you can connect to the album on the Internet through the WAP address.

The WAP address is as follows:

http://wap:8582/photoalbum.wml

Internet

You can access various WAP(Wireless Application Protocol) services such as banking, news, weather reports and flight information. These services are specially designed for mobile phones and they are maintained by the WAP service providers.

Check the availability of WAP services, pricing and tariffs with your network operator and/or the service provider whose service you wish to use. Service providers will also give you instructions on how to use their services.

Please contact your service provider to open an Internet account. To use the Web Browser, you must indicate your phone number via the **Own Number** menu option (See page 62 for further details.)

To launch the browser in standby mode, press and hold down the key.

Once connected, the homepage is displayed. All web content is determined by the service provider.

You can open any WWW page by entering its URL address.
To exit the browser at any time, press the key.

The idle screen is displayed.

Navigating with the WAP Browser

You can surf the Internet using either the phone keys or the WAP Browser menu.

Using the Phone Keys

When surfing the Internet, the phone keys function differently from the phone mode.

Key	Description
Up / down navigation Key	Scroll each line of the content area

Using the WAP Browser Menu

There are various menu options available when surfing the Wireless Web.

Note

The WAP Browser menus may vary, depending on your version of the browser.

GoRogers *Menu 5.1*

Connect to a homepage. The homepage may be the site which is defined in the activated profile. It will be defined by the Service Provider if you have not defined it in the activated profile.

Access Point *Menu 5.2*

A profile is the network information used to connect to the Internet.

The options are:

- **Activate:** Activates the selected network.
- **Settings:** View the various items of the current profile.
- **Rename:** Revises the name on the profile.

Cache Settings *Menu 5.3*

The information or services you have accessed are stored in the cache memory of the phone.

Clear Cache *(Menu 5.3.1)*

Removes all content saved in cache.

Cache Check *(Menu 5.3.2)*

Sets a value whether a connection attempt is made through cache or not.

Note

Cache is a buffer memory, which is used to store data temporarily.

Security Certificates *Menu 5.4*

Shows a list of the available certificates.

WAP Information *Menu 5.5*

The WAP Browser version is displayed.

Sounds

Download Ring Tunes *Menu 6.1.*

Download the ringtone from the selected URL address.

Ringtones *Menu 6.2*

This option allows you to select the required ring melody. You can choose between many different melodies. If you have any downloaded sounds from the Internet or any received ring tone messages, you can view the list in this menu.

Volume *Menu 6.3*

- **Ringtone:** To set the volume level for the ringing tones.
- **Key Tone:** To set the volume level for keypad tones.
- **Call:** This can adjust the volume level.
- **Headset:** When using the Headset, volume level can be adjusted.
- **Handsfree:** When using the Handsfree, volume level can be adjusted.

Ring Alert Type *Menu 6.4*

This option determines the incoming call notification mode. You can select from **Ring, Ring** and **Vibrate** and **Vibrate then Ring.**

Message Alert Tones *Menu 6.5*

Select the alert tone for messages.

Note

Muting soft key only changes muting for this specific menu.

Key Tones *Menu 6.6*

This menu option allows you to select a tone that the phone sounds when you press a key. You can select an option from **Beep** and **Voice.**

Note

The Voice option provides voice enunciation of each number typed in from the keypad. Beep is the default tone for all other keystrokes. Keypad tone and volume must be enabled as well as phone muting turned off to hear Voice option

Voice Recording *Menu 6.7*

For further details, see page 56 (Menu 7.3).

Alarm Clock *Menu 7.1*

Set the alarm to ring at a specific time. In the **Alarm Clock** menu, the following options are available:

On: Set the time (hour and minute) for activating the alarm.

1. Go to Alarm Clock
2. Select [**On**] by pressing the right/left navigation keys.
3. If you want to set the time for activating the alarm, press the down navigation key.
4. Enter the required time, press the down navigation key.
5. The following options are available.
   - **Once:** The alarm rings only once and is then deactivated.
   - **Daily:** The alarm rings every day at the same time.
   - **Weekly:** The alarm rings every week on the same day and at the same time.
   - **Monthly:** The alarm rings every month on the same day and at the same time.
6. Allows you to select the alarm melody by using the right / left navigation keys.
7. Press the left soft key [**Set**].

Off: Cancel the alarm.

Notice

If this option is set to **On,** the alarm will ring at the specified time, even when the phone is switched off. To stop the alarm when it rings the right soft key [**Quit**].

Calendar *Menu 7.2*

When you enter this menu a calendar will be displayed. Top of the screen indicates sections for date. A square cursor is used to locate a particular day. If a schedule or memo has been entered on a particular day, that date will appear in a different colour. This function helps to remind you of the schedule and memo. The phone will sound an alarm tone if it has been set for a specific note.

For changing the day, month and year.

Key	Description
Up / down navigation key	Weekly
Left / right navigation key	Daily

Note

Schedule editing options are available only after an initial appointment has been entered into your calendar. If an entry has been made, then a calendar icon appears on the idle display on the date of the appointment, and, when viewing the calendar, a date with appointments is highlighted or shaded differently from dates with no appointments.

- **View:** Press the left soft key [Options] to delete or edit the note you selected.
- **Edit:** Allows you to edit the schedule.
- **Delete:** Allows you to delete the schedule.
- **Add New:** You can edit maximum of 30 characters and create up to 30 notes.
- **Calendar:** Allows you to consult the calendar.
- **Scheduler Tone:** The phone can sound an alarm tone when the scheduled date for an event has been reached with this option.
- **View All Schedules:** Shows the notes that are set for all days. Use the up / down navigation keys to browse through the note lists. You can use the menu by press the left soft key [Options].
- **Go To Date:** Allows you to jump to a specific date.
- **Delete Past:** Delete past schedule event that has already been notified.
- **Delete All:** Delete all schedules. You are asked to confirm your action.

Note

You can see Edit, Delete,View all schedules, Delete past and Delete all menus dependent on setting of the schedule.

Voice Recording *Menu 7.3*

Allows you to record a memo. You can record up to 3 voice messages with each message up to 30 seconds.

1. Once recording is started, the message '**Recording...**' and the remaining time are displayed.

Note

If all memo locations are full, you must delete an old memo before recording a new one.

2. If you want to finish recording, press the left soft key [**Save**].Once recording is saved it will display with date and time of recording in the Voice Recording menu display.

- **Play:** Allows you to play back all memos recorded, starting with the most recent memo.

- **Delete:** Allows you to delete a specific memo. All memos recorded are played back, starting with the most recent one.
- **Record New:** Allows you to record a memo.
- **Rename:** Allows you to rename a specific memo.
- **Send Via Multimedia Message:** Sends the selected voice memo by MMS.
- **Delete All:** Allows you to delete all memos.

Calculator *Menu 7.4*

Using this feature, you can use the phone as a calculator. The calculator provides the basic arithmetic functions: addition, subtraction, multiplication and division.

Using the Calculator

1. Enter the first number using the numeric keys.

Notice

To make a number negative, press the (minus symbol) key prior to entering a number.

2. Use the navigation keys to select a sign for calculation.

Note

To include a decimal point, press the key.

3. To calculate the result, press the left soft key [**Result**] or key.

Memo *Menu 7.5*

To write, edit and delete a memo, proceed as follows.

1. Press the left soft key [**Add**].
2. Input the memo and press the left soft key [**Options**].

The following options are available.

- **Save:** Allows you to save the memo.
- **T9 Languages:** Allows you to select the T9 language to use in memo.
- **Exit Editor:** Allows you to exit in memo editor.

Or

1. Select a Memo.
2. Press the left soft key [**Options**].

The following options are available.

- **View:** Allows you to view the memo.
- **Delete:** Allows you to delete the memo.

- **Edit:** If you select a memo that already exists, you can press the left soft key [**Options** → **Edit**] to edit the memo displayed.
- **Add New:** Add a new memo, up to 20 memos and 40 characters per each memo.
- **Delete All:** Allows you to delete all memos. You are asked to confirm your action.

World Time *Menu 7.6*

Allows you to check the major cities around the world, using the left/right navigation keys.

The screen shows the city name, current date and time.

To select the time zone in which you are located, proceed as follows:

1. Select the city corresponding to your time zone by pressing the left/right navigation keys once or more times. The local date and time are displayed.
2. Press the left soft key [**Options**].
3. If you want to set, press the key.
4. If you want to set Daylight Savings, press the key in Options menu.

Note

The time zone setting of each city in **World Time** menu may be affected by network condition.

Unit Converter *Menu 7.7*

This converts any measurement into a unit you want. There are four types that can be converted into units: **Length, Surface, Weight** and **Volume.**

1. You can select one of four unit types by pressing the left soft key [**Unit**].
2. Select the standard value by using the left/right navigation keys.
3. Select the unit you want to convert by pressing the up/down navigation keys.
4. You can check the converted value for the unit you want. Also, you can input a decimal number by pressing the key.

Address Book

You can store phone numbers and their corresponding names in the memory of your SIM card. In addition, you can store up to 255 numbers and names in the phone memory. The SIM card and phone memories, although physically separate, are used as if they were a single entity, called the Address Book.

Contact List *Menu 8.1*

1. Press the left soft key [Menu].
2. Press , .

Note

You can also access the Address Book on the idle screen by pressing the down on the navigation key.

3. If you want to edit, delete or copy an entry, select [**Options**].

- **View Detail:** To view in detail the selected name.
- **Delete:** You can delete an entry.
- **Write Text Message:** You can write a text message. For further details, see page 39.
- **Write Multimedia Message:** You can write a multimedia message. For futher details, see page 41.
- **Edit:** You can edit the name, mobile number, home number, office number, E-mail, group and memo by pressing the left soft key [**Select**].
- **Copy To Phone:** You can copy an entry from SIM to phone.
- **Voice Tag:** Allows you to set a voice tag to voice dial the entry.

4. Once you have found the required entry, press the to dial the number.

New Contact *Menu 8.2*

You can add an address book entry by using this function. Phone memory capacity is 255 entries. SIM card memory capacity depends on the cellular service provider. Each entry can have up to 20 characters and save characters in the SIM card. The number of characters is dependent on the SIM.

1. Press the left soft key [**Menu**].
2. Press , and press the left soft key [**Select**].
3. You can add new Address book entries to SIM memory or the Address book memory. To select the memory, go to **Set Memory** (Menu 8.8). (Refer to page 62)

Speed Dials *Menu 8.3*

You can assign the following keys, 2 to 9 with a name list entry. You can call directly by pressing an assigned key for 2-3 seconds.

1. Press the left soft key [**Menu**].
2. Press 8 , 3 .
3. If you want to add a number to speed dial, select an empty slot <**Empty**>. Then, you can search the name from the Address Book.
4. Select the name from the speed dial. You can change and delete the name. In addition, you can call by this number, write a text message or a multimedia message.

Voice Tag List *Menu 8.4*

You can see all the phone numbers which contain voice tags. You can also call directly by pressing the key. After selecting the phone number by using the up / down navigation keys, press the left soft key [**Options**] and it will offer the following submenus:

- **Listen:** You can play back the voice tag attached to a phone number.
- **Change:** You can change the voice tag attached to a phone number.
- **Remove:** You can delete the voice tag attached to a phone number.
- **Call:** You can call by selecting this submenu.
- **Add New Voice Tag:** You can add a new voice tag to a phone number.
- **Remove All:** You can delete all the voice tag attached to a phone number.

Note

The voice tag can only be attached to the main number which you set. If you change your main number, the voice tag will belong to the new main number. You cannot attach a voice tag to your mobile number, home number and office number simultaneously. You can add a voice tag to a phone number in the SIM card. The voice tag can be erased if you remove or change the SIM card.

Caller Groups *Menu 8.5*

There are 7 predefined groups as well as one additional group labeled Others where you can create your own lists.

1. You can set the phone to ring in a specific way and display a preselected graphic icon when a particular person calls you.
2. Scroll to **Caller Groups** then press the left soft key [**Select**] to enter this menu.
3. Every Group list will be displayed: **Family, VIP, Friends, Colleague, Group 1, Group 2, Others.**
4. Select the Group name that you want to manage by pressing the left soft key [**Options**].
5. You will see the following submenus under the predefined groups except for the **Others** group.
   - **Members List:** Allows you to see the member list in the group.
   - **Group Ring Tone:** Allows you to select the ring tone to be used when you receive a voice phone call from a person in the group.
   - **Group Icon:** Allows you to select the graphic icon to be displayed when you receive a call from a person in the group.
   - **Add Member:** Allows you to add the member to the group.
   - **Delete Member:** Allows you to delete the member in the group.
   - **Rename:** Allows you to assign a name to the group.

Copy All *Menu 8.6*

You can copy or move entries from the SIM card memory to the phone memory and vice versa.

SIM To Phone *(Menu 8.6.1)*

You can copy all the entries from the SIM card to phone memory.

Phone To SIM *(Menu 8.6.2)*

You can copy all the entries from the phone memory to the SIM card.

The following options are available:

- **Keep Original:** When copying, Original Dial Number is kept.
- **Delete Original:** When copying, Original Dial Number will be erased.

Delete All *Menu 8.7*

You can delete all SIM and Phone book entries, as well as your Voice tags. With the exception of Voice tags, you will need to enter your security code to delete your SIM and Phone book entries.

Press the key to return to the standby mode.

Set Memory *Menu 8.8*

Scroll to highlight the **Set Memory** option, then press the left soft key [**Select**].

- If you select **Variable** when adding entry, the phone will ask where to store the information.
- If you select **SIM** or **Phone**, the phone will store an entry to the SIM or the phone.

Information *Menu 8.9*

Memory Status *(Menu 8.9.1)*

You can check how many names and numbers are stored in the Address Book (SIM card and phone memories).

* Own Number *(Menu 8.9.2)*

Allows you to display your phone number in the SIM card.

* : Shown only if supported by SIM card

You can use the Sound Settings feature to customize various settings, such as the:

- Ring melody, volume and type
- Sounds made when you press a key, make an error or receive a message

Display *Menu 9.1*

You can change the background image and the display style for Menu Mode according to your preference.

My Wallpaper *(Menu 9.1.1)*

This option allows you to change the background image (wallpaper) to be displayed in idle mode.

To change the background image, proceed as follows.

1. Scroll through the list by pressing the left or right navigation key.

You have various preset images available. You can also select the blank background or any images downloaded from the Internet.

2. Press the left soft key [**Select**] when the required image is highlighted.

The selected image is displayed.

Backlight *(Menu 9.1.2)*

You can select whether or not the phone uses the backlight. A marginal increase in the standby / talk time can be achieved by turning the backlight off.

It turns off if no key is pressed within one minute.

- **10 Seconds** turns the backlight off 10 seconds after the last key was pressed.
- **30 Seconds** turns the backlight off 30 seconds after the last key was pressed.
- **60 Seconds** turns the backlight off 60 seconds after the last key was pressed.

Contrast *(Menu 9.1.3)*

This option allows you to adjust the contrast of the LCD screen by pressing the navigation key.

Screen Saver *(Menu 9.1.4)*

The phone automatically activates a screen saver after a certain length of time when none of the phone functions have been used, see Backlight (Menu.9.1.2) on page 63.

Power On Sound *(Menu 9.1.5)*

If you set to **On** your phone will sound the specific sound when you switch it on/off.

Languages *(Menu 9.1.6)*

You can select the display language. When the language option is set to **Automatic,** the language is automatically selected according to the language of the SIM card used. English will be set if the language on the SIM card is not supported in the phone.

Menu Style *(Menu 9.1.7)*

This option allows you to select the menu display style. You can choose either **Icon** style or **List** style.

Date & Time *Menu 9.2*

Set Date *(Menu 9.2.1)*

Allows you to enter the day, month and year. You can change the date format via the **Date Format** menu option.

Date Format *(Menu 9.2.2)*

YYYY/MM/DD(year/month/day)

DD/MM/YYYY(day/month/year)

MM/DD/YYYY(month/day/year)

Set Time *(Menu 9.2.3)*

Allows you to enter the current time. You can choose the time format via the Time Format menu option.

Time Format *(Menu 9.2.4)*

24 Hours / 12 Hours

Auto Update *(Menu 9.2.5)*

Select **On** to set the phone to automatically update the time and date according to the current time zone.

Call Settings *Menu 9.3*

To change the settings for call diverting:

* Call Forwarding *(Menu 9.3.1)*

When this network service is activated, you can direct your incoming calls to another number, for example, to your voice mailbox number. For details, contact your service provider.

The following options are available:

* ▶ **All Voice Calls:** Diverts voice calls unconditionally.
* ▶ **If Busy:** Diverts voice calls when the phone is in use.
* ▶ **If No Reply:** Diverts voice calls which you do not answer.
* ▶ **If Out Of Reach:** Diverts voice calls when the phone is switched off or out of coverage.
- ▶ **All Data Calls:** Diverts to a number with a PC connection unconditionally.
- ▶ **All Fax Calls:** Diverts to a number with a fax connection unconditionally.
  - **Activate:** Activates the corresponding service.
    - **Number:** Inputs the number for diverting.
  - **Cancel:** Cancels the corresponding service.
  - **View Status:** Checks the status of the service.
- ▶ **Cancel All:** Cancels all call divert service.

Answer Mode *(Menu 9.3.2)*

Allows you to determine how to answer the phone.

- ▶ **Any Key:** You can answer an incoming call by pressing any key, except the key.
- ▶ **Send Key Only:** You can answer an incoming call by only pressing the key.

* : Shown only if supported by SIM card

* Send My Number *(Menu 9.3.3)*

This network service allows you to set your phone number to be displayed **On** or hidden **Off** from the person to whom you are calling. Select **Set By Network** to reset the phone to the setting that you have agreed upon with your service provider.

* Call Waiting *(Menu 9.3.4)*

The network will notify you of a new incoming call while you have a call in progress. Select **Activate** to request the network to activate call waiting, **Cancel** to request the network to deactivate call waiting or **View Status** to check if the function is active or not.

Minute Minder *(Menu 9.3.5)*

This option allows you to specify whether the phone must beep every minute during an outgoing call to keep you informed of the length of the call.

Auto Redial *(Menu 9.3.6)*

Select On, and your phone will make a maximum of three attempts to connect the call after an unsuccessful call attempt.

Send DTMF *(Menu 9.3.7)*

You can send the DTMF (Dual Tone Multi-Frequency) tones of the number on the display during a call.

This option is helpful for entering a password or account number when you call an automated system, like a banking service.

Security *Menu 9.4*

Various codes and passwords are used to protect the features of your phone. They are described in the following sections (see page 22).

PIN Code Request *(Menu 9.4.1)*

When the PIN code request feature is enabled, you must enter your PIN each time you switch the phone on. Consequently, any person who does not have your PIN cannot use your phone without your approval.

Note

Before disabling the PIN code request feature, you must enter your PIN.

* : Shown only if supported by SIM card

The following options are available:

- **Enable:** You must enter the PIN each time the phone is switched on.
- **Disable:** The phone connects directly to the network when you switch it on.

Phone Lock *(Menu 9.4.2)*

When the **Phone Lock** feature is enabled, the phone is locked and you must enter the phone password each time the phone is switched on. The password is factory set to **0000**. To change the phone password, refer to the **Change Codes - Security Code** menu option [Menu 9.5.6]. Once the correct password has been entered, you can use the phone until you switch it off.

The following options are available:

When Power On

- **Off:** You do not need to enter the phone password when you switch the phone on.
- **Always On:** You are required to enter the phone password when you switch the phone on.
- **When SIM Changed:** Your phone will request security code only when you change your SIM card.

Immediately

After entering the correct security code, the phone will lock after going into the idle state. If you want to disable this phone lock, you should enter the right security code after pressing the right soft key. If you power off in the phone lock state, when the phone is next powered on, the phone is in the lock state.

Auto Key Lock *(Menu 9.4.3)*

When you enable Automatic key lock, keypad will be lock automatically on an idle screen after selected seconds without any key requesting. if you set to Off, keypad will not be locked automatically.

Note

If you want to unlock your phone keypad, press the left soft key [Unlock] and then press the right soft key. But if you enabled Automatic key lock before, your phone keypad will unlock and then after selected seconds the keypad will lock up again automatically.

* Call Barring Service *(Menu 9.4.4)*

Call barring allows you to restrict from making and receiving calls with your phone. For this function, you need the barring password, which you can obtain from your service provider.

The following options are available:

- **All Outgoing:** Calls cannot be made.
- **Outgoing International:** International calls cannot be made.
- **Cancel All Barrings:** All call barring settings are deactivated; calls can be made and received normally.
- **Change Password:** You can set and change the call barring password obtained from your service provider using this option. You must enter the current password before you can specify a new one. Once you have entered a new password, you are asked to confirm it by entering it again.

Note

To use Call Barring Service, you must input the network password. When calls are barred, calls may be possible to certain emergency numbers in some networks.

Fixed Dial Number (FDN) *(Menu 9.4.5)*

Allows you to restrict your outgoing calls to selected phone numbers, if this function is supported by your SIM card. The PIN2 code is required.

The following options are available:

- **Enable:** You can only call phone numbers stored in the Address Book.You must enter your PIN2.
- **Disable:** You can call any number.
- **Number List:** You can view the number list saved as fixed dial number.

Note

Not all SIM cards have a PIN2. If your SIM card does not, this menu option is not displayed.

Change Codes *(Menu 9.4.6)*

The Change Codes feature allows you to change your current password to a new one. You must enter the current password before you can specify a new one.

You can change the access codes: **Security Code, PIN1 Code, PIN2 Code**

* : Shown only if supported by SIM card

Note

PIN: Personal Identification Number.

Connection *Menu 9.5*

* Network Selection *(Menu 9.5.1)*

The Network Selection feature allows you to indicate how the network you will use is selected when roaming outside your home area.
Options are: Automatic, Manual and Preferred.

Note

You can select a network other than your home network only if it has a valid roaming agreement with your home network.

- **Automatic:** Allows you to set the phone to automatically search for and select one of the cellular networks available in your area. The phone will be set to **Automatic** by default.
- **Manual:** Allows you to select the desired network manually from a list of networks. If the connection to the manually selected network is lost, the phone will sound an error tone and ask you to select a network again. The selected network must have a roaming agreement with your home network, that is, the operator whose SIM card is in your phone. The phone lets you select another network if the phone fails to access the selected network. If you switch off the phone, the phone will be reset to Automatic.
- **Preferred:** You can set a list of preferred networks the handset should attempt to register with first, before attempting to register to any other networks. This list is created from the handset's predefined list of known networks.

GPRS Attach *(Menu 9.5.2)*

If you select **Power On** and you are in a network that supports packet data, the phone registers to the GPRS network and sending short messages will be done via GPRS. Also, starting an active packet data connection, for example, to send and receive e-mail, is quicker. If you select **When Needed,** the phone will use a packet data connection only if you start an application or action that needs it. The GPRS connection is closed after it is not used by any application.

Note

If there is no GPRS coverage and you have chosen Power On, the phone will periodically try to establish a packet data connection.

Access Point *(Menu 9.5.3)*

This feature sets the Profile during the WAP connections. Please see page 51 for further detail. The Profile menu under the Access Point feature will display Add, Delete and Editor options, but the reason why Activate option is not available is that there is no way of knowing whether WAP will be used to activate the content.

Reset Access Point *(Menu 9.5.4)*

This allows Profile information to be restored to original setting. For example, this option will restore the Profile that has been deleted by the Delete All selection from the Access Point (Menu 5.2) submenu.

Reset Setting *Menu 9.6*

You can easily reset your phone to its default configuration. To do so, proceed as follows.

1. Select the Reset Setting menu option.

2. Enter the 4-digit phone password.

Note

The password is preset to 0000.

Q&A

Please check to see if any problems you have encountered with the phone are described in this section before taking the phone in for a service or calling your service provider.

Q How do I view the list of outgoing calls, incoming calls and missed calls?

A Press the key.

Q How do I clear all call history?

A Press the left soft key [Menu] and then the keys.

Q Why is the connection inconsistent or not audible in certain areas?

A When frequency environment is unstable in a certain area, connection may be inconsistent and not audible. Relocate to another area and try again.

Q Why is the connection not consistent or abruptly disconnects even when established?

A When frequency is unstable or weak or if there are too many users, connection may be cut off even after it was established. Please try again later or attempt after relocating to other areas.

Q Why does the LCD not turn on?

A Remove the battery and turn on the power after placing it back on. If there is no change, fully charge the battery and try again.

Q Why is there an echo when a connection is made with certain telephones in a certain area?

A This is called the 'Echo Phenomenon', where it occurs if connection volume is too high or caused by special properties (semi electronic telephone exchange) of the equipment on the other end.

Q Why does the phone heat up?

A The phone may get hot when there is a very long call duration or when games are played or even when surfing the Internet for a long time. This has no effect upon the life of the product or performance.

Q Why is there no ring tone, but only a blinking LCD screen?

A Phone may be set to 'Vibration All' or in 'Silent All' mode. In the Sound menu, please select Volume → Ringtone → Volume 1 ~ Volume 5.

Q Why does the battery life get shorter in standby mode?

A The battery is worn out. As time passes, the battery life gradually becomes shorter. If the battery lasts about half the amount of time as when first purchased, it's time to purchase a new battery.

Q Why does the battery run out so quickly during normal use?

A It is due to the user environment or a large number of calls or weak signal.

Q Why is no number dialed when you recall a Address Book entry?

A Check that the number has been stored correctly by using the address book Search feature. Re-store them, if necessary.

Q Why can't my correspondent reach me?

A Is your phone switched on ( ) pressed for more than three seconds)? Are you accessing the right cellular network? Or, you may have set an incoming call barring option.

Q I cannot find the lock, PIN or PUK code. What is my password?

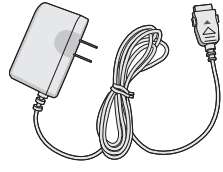
A The default lock code is '0000'. If you forget or lose the lock code, contact your phone dealer. If you forget or lose a PIN or PUK code, or if you have not received such a code, contact your network service provider.

Accessories

There are a variety of accessories available for your mobile phone. You can select these options according to your personal communication requirements. Consult your network service provider for availability.

Travel Adapter

This adapter allows you to charge the battery.

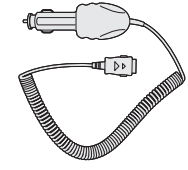


Battery (7 60 mAh)

Standard battery is available.

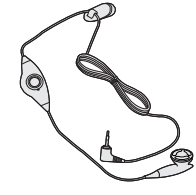
Vehicle Power Adapter

You can operate the phone and trickle charge the phone battery from your vehicle by using the vehicle power adapter. It takes 3 hours to charge a completely discharged battery.



Headset

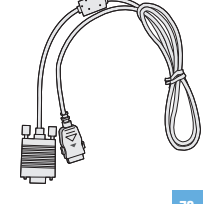
Connects to your phone, allowing hands-free operation. Includes earpiece, microphone and integrated call answer/ termination button.



Data Cable Kit

Connects your phone to a PC.

Cable can be used for GPRS modem connectivity or PC Synch of your calendar and contacts.



TIA Safety Information

Provided herein is the complete TIA Safety Information for Wireless Handheld phones. Inclusion of the text covering Pacemakers, Hearing Aids and Other Medical Devices is required in the owner's manual for CTIA Certification. Use of the remaining TIA language is encouraged when appropriate.

Exposure to Radio Frequency Signal

Your wireless handheld portable telephone is a low-power radio transmitter and receiver. When it is ON, it receives and also sends out radio frequency (RF) signals.

In August, 1996, the Federal Communications Commissions (FCC) adopted RF exposure guidelines with safety levels for handheld wireless phones. Those guidelines are consistent with the safety standards previously set by both U.S. and international standards bodies:

ANSI C95.1 (1992) *

NCRP Report 86 (1986)

ICNIRP (1996)

Those standards were based on comprehensive and periodic evaluations of the relevant scientific literature. For example, over 120 scientists, engineers and physicians from universities, government health agencies and industry reviewed the available body of research to develop the ANSI Standard (C95.1).

*American National Standards Institute; National Council on Radiation Protection and Measurements; International Commission on Non-Ionizing Radiation Protection

The design of your phone complies with the FCC guidelines (and those standards).

Antenna Care

Use only the supplied or an approved replacement antenna. Unauthorized antennas, modifications or attachments could damage the phone and may violate FCC regulations.

Phone Operation

NORMAL POSITION: Hold the phone as you would any other telephone with the antenna pointed up and over your shoulder.

Tips on Efficient Operation

For your phone to operate most efficiently:

- Do not touch the antenna unnecessarily when the phone is in use. Contact with the antenna affects call quality and may cause the phone to operate at a higher power level than otherwise needed.

Driving

Check the laws and regulations on the use of wireless phones in the areas where you drive. Always obey them. Also, if using your phone while driving, please:

- Give full attention to driving — driving safely is your first responsibility;
- Use hands-free operation, if available;
- Pull off the road and park before making or answering a call if driving conditions so require.

Electronic Devices

Most modern electronic equipment is shielded from RF signals. However, certain electronic equipment may not be shielded against the RF signals from your wireless phone.

Pacemakers

The Health Industry Manufacturers Association recommends that a minimum separation of six (6') inches be maintained between a handheld wireless phone and a pacemaker to avoid potential interference with the pacemaker. These recommendations are consistent with the independent research by and recommendations of Wireless Technology Research. Persons with pacemakers:

- Should ALWAYS keep the phone more than six inches from their pacemaker when the phone is turned ON;
- Should not carry the phone in a breast pocket.
- Should use the ear opposite to the pacemaker to minimize the potential for interference.
- If you have any reason to suspect that interference is taking place, turn your phone OFF immediately.

Hearing Aids

Some digital wireless phones may interfere with some hearing aids. In the event of such interference, you may want to consult your service provider.

Other Medical Devices

If you use any other personal medical device, consult the manufacturer of your device to determine if they are adequately shielded from external RF energy. Your physician may be able to assist you in obtaining this information.

Turn your phone OFF in health care facilities when any regulations posted in these areas instruct you to do so. Hospitals or health care facilities may be using equipment that could be sensitive to external RF energy.

Vehicles

RF signals may affect improperly installed or inadequately shielded electronic systems in motor vehicles. Check with the manufacturer or its representative regarding your vehicle.

You should also consult the manufacturer of any equipment that has been added to your vehicle.

Posted Facilities

Turn your phone OFF in any facility where posted notices so require.

Aircraft

FCC regulations prohibit using your phone while in the air. Turn your phone OFF before boarding an aircraft.

Blasting Areas

To avoid interfering with blasting operations, turn your phone OFF when in a 'blasting area' or in areas posted: 'Turn off two-way radio'. Obey all signs and instructions.

Potentially Explosive Atmosphere

Turn your phone OFF when in any area with a potentially explosive atmosphere and obey all signs and instructions. Sparks in such areas could cause an explosion or fire resulting in bodily injury or even death.

Areas with a potentially explosive atmosphere are often, but not always, marked clearly. Potential areas may include: fueling areas (such as gasoline stations); below deck on boats; fuel or chemical transfer or storage facilities; vehicles using liquefied petroleum gas (such as propane or butane); areas where the air contains chemicals or particles (such as grain, dust or metal powders); and any other area where you would normally be advised to turn off your vehicle engine.

For Vehicles Equipped with an Air Bag

An air bag inflates with great force. DO NOT place objects, including either installed or portable wireless equipment, in the area over the air bag or in the air bag deployment area. If in-vehicle wireless equipment is improperly installed and the air bag inflates, serious injury could result.

FDA Consumer Update

The U.S. Food and Drug Administration's Center for Devices and Radiological Health Consumer Update on Mobile Phones.

1. Do wireless phones pose a health hazard?

The available scientific evidence does not show that any health problems are associated with using wireless phones. There is no proof, however, that wireless phones are absolutely safe. Wireless phones emit low levels of radiofrequency energy (RF) in the microwave range while being used. They also emit very low levels of RF when in the standby mode. Whereas high levels of RF can produce health effects (by heating tissue), exposure to low level RF that does not produce heating effects causes no known adverse health effects. Many studies of low level RF exposures have not found any biological effects. Some studies have suggested that some biological effects may occur, but such findings have not been confirmed by additional research. In some cases, other researchers have had difficulty in reproducing those studies, or in determining the reasons for inconsistent results.

2. What is the FDA's role concerning the safety of wireless phones?

Under the law, the FDA does not review the safety of radiation-emitting consumer products such as wireless phones before they can be sold, as it does with new drugs or medical devices. However, the agency has authority to take action if wireless phones are shown to emit radiofrequency energy (RF) at a level that is hazardous to the user. In such a case, the FDA could require the manufacturers of wireless phones to notify users of the health hazard and to repair, replace or recall the phones so that the hazard no longer exists.

Although the existing scientific data do not justify FDA regulatory actions, the FDA has urged the wireless phone industry to take a number of steps, including the following:

- Support needed research into possible biological effects of RF of the type emitted by wireless phones;
- Design wireless phones in a way that minimizes any RF exposure to the user that is not necessary for device function; and
- Cooperate in providing users of wireless phones with the best possible information on possible effects of wireless phone use on human health.

The FDA belongs to an interagency working group of the federal agencies that have responsibility for different aspects of RF safety to ensure coordinated efforts at the federal level. The following agencies belong to this working group:

- National Institute for Occupational Safety and Health
- Environmental Protection Agency
- Occupational Safety and Health Administration
- National Telecommunications and Information Administration

The National Institutes of Health participates in some interagency working group activities as well.

The FDA shares regulatory responsibilities for wireless phones with the Federal Communications Commission (FCC). All phones that are sold in the United States must comply with FCC safety guidelines that limit RF exposure. The FCC relies on the FDA and other health agencies for safety questions about wireless phones.

The FCC also regulates the base stations that the wireless phone networks rely upon. While these base stations operate at higher power than do the wireless phones themselves, the RF exposures that people get from these base stations are typically thousands of times lower than those they can get from wireless phones. Base stations are thus not the subject of the safety questions discussed in this document.

3. What kinds of phones are the subject of this update?

The term 'wireless phone' refers here to handheld wireless phones with built-in antennas, often called 'cell', 'mobile' or 'PCS' phones. These types of wireless phones can expose the user to measurable radiofrequency energy (RF) because of the short distance between the phone and the user's head. These RF exposures are limited by FCC safety guidelines that were developed with the advice of the FDA and other federal health and safety agencies. When the phone is located at greater distances from the user, the exposure to RF is drastically lower because a person's RF exposure decreases rapidly with increasing distance from the source. The so-called 'cordless phones,' which have a base unit connected to the telephone wiring in a house, typically operate at far lower power levels, and thus produce RF exposures far below the FCC safety limits.

4. What are the results of the research done already?

The research done thus far has produced conflicting results, and many studies have suffered from flaws in their research methods. Animal experiments investigating the effects of radiofrequency energy (RF) exposures characteristic of wireless phones have yielded conflicting results that often cannot be repeated in other laboratories. A few animal studies, however, have suggested that low levels of RF could accelerate the development of cancer in laboratory animals. However, many of the studies that showed increased tumor development used animals that had been genetically engineered or treated with cancer-causing chemicals so as to be pre-disposed to develop cancer in the absence of RF exposure. Other studies exposed the animals to RF for up to 22 hours per day. These conditions are not similar to the conditions under which people use wireless phones, so we don't

know with certainty what the results of such studies mean for human health.

Three large epidemiology studies have been published since December 2000. Between them, the studies investigated any possible association between the use of wireless phones and primary brain cancer, glioma, meningioma, or acoustic neuroma, tumors of the brain or salivary gland, leukemia, or other cancers. None of the studies demonstrated the existence of any harmful health effects from wireless phone RF exposures. However, none of the studies can answer questions about long-term exposures, since the average period of phone use in these studies was around three years.

5. What research is needed to decide whether RF exposure from wireless phones poses a health risk?

A combination of laboratory studies and epidemiological studies of people actually using wireless phones would provide some of the data that are needed. Lifetime animal exposure studies could be completed in a few years. However, very large numbers of animals would be needed to provide reliable proof of a cancer promoting effect if one exists. Epidemiological studies can provide data that is directly applicable to human populations, but 10 or more years follow-up may be needed to provide answers about some health effects, such as cancer. This is because the interval between the time of exposure to a cancer-causing agent and the time tumors develop — if they do — may be many, many years. The interpretation of epidemiological studies is hampered by difficulties in measuring actual RF exposure during day-to-day use of wireless phones. Many factors affect this measurement, such as the angle at which the phone is held, or which model of phone is used.

6. What is the FDA doing to find out more about the possible health effects of wireless phone RF?

The FDA is working with the U.S. National Toxicology Program and with groups of investigators around the world to ensure that high priority animal studies are conducted to address important questions about the effects of exposure to radiofrequency energy (RF).

The FDA has been a leading participant in the World Health Organization International Electromagnetic Fields (EMF) Project since its inception in 1996. An influential result of this work has been the development of a detailed agenda of research needs that has driven

the establishment of new research programs around the world. The project has also helped develop a series of public information documents on EMF issues. The FDA and the Cellular Telecommunications & Internet Association (CTIA) have a formal Cooperative Research and Development Agreement (CRADA) to do research on wireless phone safety. The FDA provides the scientific oversight, obtaining input from experts in government, industry and academic organizations. CTIA-funded research is conducted through contracts with independent investigators. The initial research will include both laboratory studies and studies of wireless phone users. The CRADA will also include a broad assessment of additional research needs in the context of the latest research developments around the world.

7. How can I find out how much radio frequency energy exposure I can get by using my wireless phone?

All phones sold in the United States must comply with Federal Communications Commission (FCC) guidelines that limit ra dio frequency energy (RF) exposures. The FCC established these guidelines in consultation with the FDA and the other federal health and safety agencies. The FCC limit for RF exposure from wireless telephones is set at a Specific Absorption Rate (SAR) of 1.6 watts per kilogram (1.6 W/kg). The FCC limit is consistent with the safety standards developed by the Institute of Electrical and Electronic Engineering (IEEE) and the National Council on Radiation Protection and Measurement. The exposure limit takes into consideration the body's ability to remove heat from the tissues that absorb energy from the wireless phone and is set well below levels known to have effects. Manufacturers of wireless phones must report the RF exposure level for each model of phone to the FCC. The FCC website (http://www.fcc.gov/oet/ rfsafety) gives directions for locating the FCC identification number on your phone so you can find your phone's RF exposure level in the online listing.

8. What has the FDA done to measure the radio frequency energy coming from wireless phones?

The Institute of Electrical and Electronic Engineers (IEEE) is developing a technical standard for measuring the radio frequency energy (RF) exposure from wireless phones and other wireless handsets with the participation and leadership of FDA scientists and engineers. The standard,

'Recommended Practice for Determining the Spatial-Peak Specific Absorption Rate (SAR) in the Human Body due to Wireless Communications Devices: Experimental Techniques,' sets forth the first consistent test methodology for measuring the rate at which RF is deposited in the heads of wireless phone users. The test method uses a tissue-simulating model of the human head. Standardized SAR test methodology is expected to greatly improve the consistency of measurements made at different laboratories on the same phone. SAR is the measurement of the amount of energy absorbed in tissue, either by the whole body or a small part of the body. It is measured in watts/kg (or milliwatts/g) of matter. This measurement is used to determine whether a wireless phone complies with safety guidelines.

9. What steps can I take to reduce my exposure to radiofrequency energy from my wireless phone?

If there is a risk from these products — and at this point we do not know that there is — it is probably very small. But if you are concerned about avoiding even potential risks, you can take a few simple steps to minimize your exposure to radiofrequency energy (RF). Since time is a key factor in how much exposure a person receives, reducing the amount of time spent using a wireless phone will reduce RF exposure.

If you must conduct extended conversations by wireless phone every day, you could place more distance between your body and the source of the RF, since the exposure level drops off dramatically with distance. For example, you could use a headset and carry the wireless phone away from your body or use a wireless phone connected to a remote antenna.

Again, the scientific data do not demonstrate that wireless phones are harmful. But if you are concerned about the RF exposure from these products, you can use measures like those described above to reduce your RF exposure from wireless phone use.

10. What about children using wireless phones?

The scientific evidence does not show a danger to users of wireless phones, including children and teenagers. If you want to take steps to lower exposure to radiofrequency energy (RF), the

measures described above would apply to children and teenagers using wireless phones. Reducing the time of wireless phone use and increasing the distance between the user and the RF source will reduce RF exposure.

Some groups sponsored by other national governments have advised that children be discouraged from using wireless phones at all. For example, the government in the United Kingdom distributed leaflets containing such a recommendation in December 2000. They noted that no evidence exists that using a wireless phone causes brain tumors or other ill effects. Their recommendation to limit wireless phone use by children was strictly precautionary; it was not based on scientific evidence that any health hazard exists.

11. What about wireless phone interference with medical equipment?

Radio frequency energy (RF) from wireless phones can interact with some electronic devices. For this reason, the FDA helped develop a detailed test method to measure electromagnetic interference (EMI) of implanted cardiac pacemakers and defibrillators from wireless telephones. This test method is now part of a standard sponsored by the Association for the Advancement of Medical instrumentation (AAMI). The final draft, a joint effort by the FDA, medical device manufacturers and many other groups, was completed in late 2000. This standard will allow manufacturers to ensure that cardiac pacemakers and defibrillators are safe from wireless phone EMI.

The FDA has tested hearing aids for interference from handheld wireless phones and helped develop a voluntary standard sponsored by the Institute of Electrical and Electronic Engineers (IEEE). This standard specifies test methods and performance requirements for hearing aids and wireless phones so that no interference occurs when a person uses a 'compatible' phone and a ' compatible' hearing aid at the same time. This standard was approved by the IEEE in 2000.

The FDA continues to monitor the use of wireless phones for possible interactions with other medical devices. Should harmful interference be found to occur, the FDA will conduct testing to assess the interference and work to resolve the problem.

12. Where can I find additional information?

For additional information, please refer to the following resources:
FDA web page on wireless phones (http://www.fda.gov/cdrh/phones/index.html)
Federal Communications Commission (FCC) RF Safety Program (http://www.fcc.gov/oet/rfsafety)
International Commission on Non-Ionizing Radiation Protection (http://www.icnirp.de)
World Health Organization (WHO) International EMF Project (http://www.who.int/emf)
National Radiological Protection Board (UK) (http://www.nrpb.org.uk/)

Consumer Information on SAR (Specific Absorption Rate)

This Model Phone Meets the Government's Requirements for Exposure to Radio Waves.

Your wireless phone is a radio transmitter and receiver. It is designed and manufactured not to exceed the emission limits for exposure to radio frequency (RF) energy set by the Federal Communications Commission (FCC) of the U.S. Government. These limits are part of comprehensive guidelines and establish permitted levels of RF energy for the general population. The guidelines are based on standards that were developed by independent scientific organizations through periodic and thorough evaluation of scientific studies. The standards include a substantial safety margin designed to assure the safety of all persons, regardless of age and health.

The exposure standard for wireless mobile phones employs a unit of measurement known as the Specific Absorption Rate or SAR. The SAR limit set by the FCC is 1.6W/kg. * Tests for SAR
are conducted using standard operating positions specified by the FCC with

the phone transmitting at its highest certified power level in all tested frequency bands. Although SAR is determined at the highest certified power level, the actual SAR level of the phone while operating can be well below the maximum value. Because the phone is designed to operate at multiple power levels to use only the power required to reach the network, in general, the closer you are to a wireless base station antenna, the lower the power output.

Before a phone model is available for sale to the public, it must be tested and certified to the FCC that it does not exceed the limit established by the government-adopted requirement for safe exposure. The tests are performed in positions and locations (e.g., at the ear and worn on the body) as required by the FCC for each model. The highest SAR value for this model phone when tested for use at the ear is 1.29 W/kg and when worn on the body, as described in this user's manual, is 1.25 W/kg. (Body-worn measurements differ among phone models, depending upon available accessories and FCC requirements.) While there may be differences between SAR levels of various phones and at various positions, they all meet the government requirement for safe exposure.

The FCC has granted an Equipment Authorization for this model phone with all reported SAR levels evaluated as in compliance with the FCC RF emission guidelines. SAR information on this model phone is on file with the FCC and can be found under the Display Grant section of http://www.fcc.gov/oet/fccid after searching on FCC ID BEJL1400.

Additional information on Specific Absorption Rates (SAR) can be found on the Cellular Telecommunications Industry Association (CTIA) website at http://www.wow-com.com

*In the United States and Canada, the SAR limit for mobile phones used by the public is 1.6 watts/kg (W/kg) averaged over one gram of tissue. The standard incorporates a substantial margin of safety to give additional protection for the public and to account for any variations in measurements.

Glossary

To help you understand the main technical terms and abbreviations used in this booklet and take full advantage of the feature on your mobile phone, here are a few definitions.

Call Barring

Ability to restrict outgoing and incoming calls.

Call Forwarding

Ability to reroute calls to another number.

Call Waiting

Ability to inform users that they have an incoming call when engaged on another call.

GPRS (General Packet Radio Service)

GPRS guarantees continuous connection to the Internet for mobile phone and computer users. It is based on the Global System for Mobile Communication (GSM) circuit-switched cellular phone connections and the Short Message Service (SMS).

GSM (Global System for Mobile Communication)

International standard for cellular communication, guaranteeing compatibility between the various network operators. GSM covers most European countries and many other parts of the world.

Java

Programming language generating applications that can run on all hardware platforms, whether small, medium or large, without modification. It has been promoted for and geared heavily to the Web, both for public Web sites and Intranets. When a Java program runs from a Web page, it is called a Java applet. When it is run on a mobile phone or pager, it is called a MIDlet.

Line Identification Services (Caller ID)

Service allowing subscribers to view or block the telephone numbers of callers.

Multiparty Calls

Ability to establish a conference call involving up to five additional parties.

Phone Password

Security code used to unlock the phone when you have selected the option to lock it automatically each time it switches on.

Roaming

Use of your phone when you are outside your home area (when traveling for example).

SIM (Subscriber Identification Module)

Card containing a chip with all the information required to operate the phone (network and memory information, as well as the subscriber's personal data). The SIM card fits into a small slot on the back of the phone and is protected by the battery.

SMS (Short Message Service)

Network service sending and receiving messages to and from another subscriber without having to speak to the correspondent. The message created or received (up to 160 characters long) can be displayed, received, edited or sent.

Patent Information

This product was manufactured under one or more of the following U.S.
patents: 5276765 5749067 6061647

DATE: 2005.01.03 (FC)

Memo

MEMO

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